

**ETHNIC DIFFERENTIALS IN FERTILITY BEHAVIOUR IN  
NIGERIA**

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MATRIC NO.: DSS/12/0616**

**A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF  
DEMOGRAPHY AND SOCIAL STATISTICS, FACULTY OF SOCIAL  
SCIENCES, FEDERAL UNIVERSITY, OYE-EKITI, NIGERIA**

**IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE  
AWARD OF BACHELOR OF SCIENCE (B.Sc.) HONS IN  
DEMOGRAPHY AND SOCIAL STATISTICS**

**SEPTEMBER 2016.**

**CERTIFICATION**

This is to certify that OGUNYEMI YETUNDE TOSIN of the Department of Demography and Social Statistics, Faculty of Social Sciences, carried out a Research on the Topic “ ETHNIC DIFFERENTIALS IN FERTILITY BEHAVIOU IN NIGERIA. ” in partial fulfillment of the award of Bachelor of Science ( B.Sc ) in Federal University Oye-Ekiti, Nigeria under my Supervision

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**PROJECT SUPERVISOR**

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.....*21/11/16*.....  
**DATE**

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**EXTERNAL EXAMINER**

.....  
**DATE**

## **DEDICATION**

This project is humbly dedicated to the glory of Almighty God, the Giver of wisdom and knowledge, my strength and my helper you are worthy to be praised.

Also, to my parents Hon. and Mrs. Ogunyemi for their care, understanding and sacrifices they made for me to acquire this certificate despite the challenges.

## ACKNOWLEDGEMENT

First and foremost, I wish to express my sincere appreciation to Almighty God for His inestimable mercy towards me from my first day in the university till this moment. Despite all the challenges, I overcame all the challenges from all angles. "If not for you who had been with me from my birth, where will I be" I give thanks to you for everything my shield.

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I appreciate my proficient supervisors, Dr. Mrs. L.F. Ntoimo and Mr. B.I. Babalola for their guidance, advice and support and their immense efforts in making this project a successful one. I must confess that I have gained a lot from you and I thank God that I am one of your supervisee, thank you and may the Almighty God in his mercy continue to increase you in knowledge and bless you in all your endeavours. My appreciation also goes to all the lecturers in the department of Demography and social statistics, federal university oye-ekiti from whom I have gained one thing or the other. Worthy of note are: Prof. Peter O. Ogunjuyigbe (HOD), Dr E.A Adeyemi, Dr E.K Odushina, Mr. S.B shittu, Miss Alex-Ojei and Mr. ogunsakin Adesoji. Also, to the Non- academic staff in the department, Mr. Abatan, Mrs. Oloye, Mrs. Ajayi, Mr. Alhassan Oludayo, Miss. Owolawi and Mrs. Duyilemi I say thank you all.

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## ABSTRACT

Many scholars in Nigeria have examined a wide range of topics on fertility though mostly at local geographical areas. These include trends of fertility behaviour (Van De Walle, 1965 among others), determinants and differentials, adolescents' reproductive health in south-south. This study examined ethnicity differential and fertility behaviour among women in Nigeria, the independent variables such as women- age, religion, level of education, wealth index, occupation by ethnicity and fertility behaviour were selected using NDHS 2013 data set. The analysis of the study was done in line with the research questions and hypothesis raised for this project work. All the research questions were analysed using simple percentage while the hypotheses were tested at 0.05 level of significance. The Pearson Chi-square and PoissonRegression statistical techniques were employed for data analysis. The findings from the study disclosed that there is ethnicity differential in fertility behaviour of respondents; Hausa/Fulani has the highest fertility behaviour with average total children ever born of 4 children while the ethnic group with lowest average children ever born children happen to be from Yoruba with 2 children. It was found that most of the respondents in Yoruba ethnic group used contraceptives than other groups. While 34.8% of Yoruba ethnic group uses contraceptives, 98% of Hausa/Fulani women do not used and 28.5% used contraceptives among Igbo women. The result therefore shows that contraceptive use has effect on fertility behaviour of women across the ethnic group. Other determinant factors that were significantly related to fertility behaviour of women by ethnic groups were wealth index, occupation, religion, educational attainment of the mother. This study therefore suggested improvement on mothers orientation on high fertility in each ethnic group, especially in Hausa/Fulani in order to enhance the ethnic group in achieving sustainable development goal number two- zero hunger. By providing basic education programs, media jingles should be used to discourage high family size, Mothers

should be made to realized that the risk in high fertility focus more on them than their husbands. Thus be encouraged to use family planning to safe their life and children.

KEY WORDS: ethnic, differentials, fertility, behavior, Nigeria.



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**KEY WORDS:** ethnic, differentials, fertility, behavior, Nigeria.



## CHAPTER ONE

### 1.1 INTRODUCTION

The 2006 Population and Housing Census puts Nigeria's population at 140,431,790, with a national growth rate estimated at 3.2 percent per annum. United Nation (2006). With this population, Nigeria is the most populous nation in Africa. Nigeria's population is unevenly distributed across the country. Large areas in the Chad Basin, the middle Niger Valley, the grassland plains, among others, are sparsely populated. Aladaniyi et al; posited that the average population density for the country in 2006 was estimated at 150 people per square kilometre. Women in Nigeria have an average of 6 children. The average number of children per woman ranges from 5 in urban areas to 6 in rural areas. Fertility has not changed since the 2003 NDHS. Fertility varies dramatically by zone. Women in the South West zone have an average of 5 children compared with 7 children per women in the North West zone. Fertility also varies with mother's education and economic status. Women who have more than secondary education have an average of 3 children, while women with no education have 7 children. Fertility increases as household wealth decreases. The poorest women have almost twice as many children as women who live in the wealthiest households (7 versus 4 children per woman).

Ethnicity has been found to have a substantial effect on fertility behaviour, including the timing of family formation, and ethnic differentials in age at marriage and childbearing have been widely observed (e.g. Lesthaeghe, Kaufmann, and Meekers 1989; Arnaldo 2004). Previous studies of fertility behaviour have often sought to explain ethnic and religious

differentials in terms of one of four hypotheses. Briefly, the minority group hypothesis focuses on the insecurities of a minority group in terms of either numerical strength or social mobility (Goldscheider 2001). The norms hypothesis holds that cultural norms and religious doctrines lead to differentials in fertility through their influence on fertility-related behaviour, while the characteristics hypothesis would explain ethnic differentials entirely in terms of demographic and socioeconomic composition (Goldscheider, 2001). The fourth hypothesis, the interaction hypothesis, explains ethnic differentials in terms of both socioeconomic level and cultural or religious norms (Chamie 2006).

Many cross-sectional studies in developing countries have found cultural or religious norms to be highly relevant in explaining ethnic or religious differentials in fertility behaviour after socioeconomic factors have been taken into account (e.g. Knodel et al. 1999, Arnaldo 2004). Knodel et al. (1999) also found some support for the minority group and interaction hypotheses. However, cross-sectional studies do not take into account the dynamics of change. For the timing of family formation, especially female age at marriage, educational attainment is widely regarded as an important determinant (e.g., Jejeebhoy 1995), though it has recently been questioned as the main driver of change (Mensch, Singh, and Casterline 2006). The opposing dynamic of marriage market pressure stemming from earlier fertility decline may mask the delaying effects of education and other socioeconomic change. Variations by ethnicity in the onset and pace of fertility decline may thus influence observed ethnic differentials in the timing of marriage and family formation in the later stages of transition.

Fertility behavior is conditioned by both biological and social factors. And as in other traditional African societies, several factors have contributed to sustain relatively high levels of fertility in Nigeria. These factors include high level of infant and child mortality, early and universal marriage, early child bearing as well as child bearing within much of the reproductive life span, low use of contraception and high social values placed on child bearing. In the face of perceived high infant and child mortality, the fear of extinction encouraged high procreation with the hope that some of the births would survive to carry on the lineage. The traditionally high values placed on marriage ensured not only its universality but also its occurrence early in life with the consequence that child bearing started early in life and in most cases continued until late in the reproductive span. The institution of polygyny which sometimes promotes competition for childbearing among co-wives also contributed to sustain high fertility. Use of modern contraception was traditionally unacceptable as it violated the natural process of procreation. The traditional long period of breast-feeding and postpartum abstinence guaranteed adequate spacing between children. Available evidence suggests that there have been changes in these sociocultural factors over time. Age at marriage appears to have increased, though minimally when viewed at the national level. Use of modern contraception has increased, and improved education (especially of women) appears to have gradually eroded some of the traditional values placed on child bearing.

## 1.2. STATEMENT OF THE PROBLEM

Ethnic differentials in fertility behaviours exist mostly in a political context and are a factor in ethnic relations. The existence of ethnic differentials raises not only scientific questions about actual causes but also political questions about how people react to differentials in fertility behaviours, in some ethnic groups like Yoruba, parents discourage their children from getting married to another ethnic group like Hausa, and these is because the Hausa men are accustomed to giving birth to many children, which might not be the woman's interest, but if it was to be the same ethnic group, the problem of number of children won't arise. Also, the average number of children per woman ranges from 5 in urban areas to 6 in rural areas, and these as make fertility to vary by zone. For example, women in the South West zone have an average of 5 children compared with 7 children per women in the North West zone. Fertility also varies by each ethnic groups in Nigeria, for example, the fertility level of the three major ethnic groups in Nigeria (i.e. the Hausa's, the Igbo's and the Yoruba's) varies. Fertility also varies with mother's education and economic status. Women who have more than secondary education have an average of 3 children, while women with no education have 7 children. Fertility also increases as household wealth decreases, the poorest women have almost twice as many children as women who live in the wealthiest households. All these variation in fertility behaviours in Nigeria today has cause problems because the TFR in Nigeria has at 1990 is average of 6.3 children per women, 2003 is the average of 5.7 children per women, 2006 is average of 6 children per woman and in 2008 is 5.7 compared to that of 2013 which is the current TFR in Nigeria now is the average of 5.5 children per women which has discourage the woman of different ethnic groups of child bearing age in knowing their perception on family size weather to choose small or large family size.

Thus, variations by ethnicity in the onset of fertility behaviours may influence observed ethnic differentials in the timing of marriage and family formation. Different ethnic groups have their own total fertility rate. According to the research carried out by Wilson Houston in (2006), he said that in Yoruba land they have an average of 3-4 children, in Igbo land they have an average of 6 and above, and Hausa's also enjoy large number of children. In these cases if the same ethnic group get married to themselves, they will achieve their desired number of children e.g. Yoruba and Yoruba. Compared to when different ethnic groups get married, problems arise because the desired number of children by each ethnic group varies from another.

The total fertility rate (TFR) in Nigeria is 5.5. This means that at current fertility levels, the average Nigerian woman who is at the beginning of her childbearing years will give birth to 5.5 children by the end of her lifetime. Compared with previous national surveys, the 2003 survey shows a modest decline in fertility over the last two decades: from a TFR of 6.3 in the 1981-82 National Fertility Survey (NFS) to 6.0 in the 1990 NDHS to 5.7 in the 2003 NDHS. However, the 2003 NDHS rate of 5.7 is significantly higher than the 1999 NDHS rate of 5.2. Analysis has shown that the 1999 survey underestimated the true levels of fertility in Nigeria. On average, rural women will have one more child than urban women (6.1 and 4.9, respectively). Fertility varies considerably by region of residence, with lower rates in the south and higher rates in the north. Fertility also has a strong negative correlation with a woman's educational attainment. Most Nigerians, irrespective of their number of living children, want large families. The ideal number of children is 6.7 for all women and 7.3 for currently married women. Nigerian men want even more children than women. The ideal number of children for all men is 8.6 and for currently married men is 10.6. Clearly, one reason for the slow decline in Nigerian fertility is the

desire for large families. Birth Intervals, a 36-month interval between deliveries is best for mother and child; longer birth intervals also contribute to reduction in overall levels of fertility.

### **1.3 RESEARCH QUESTIONS**

The following questions were examined in this study.

- 1 What is the average number of living children by ethnic origin in Nigeria?
- 2 Is there an association between ethnicity and number of living children?
- 3 What is the perception of women of different ethnic groups on family size?

### **1.4 OBJECTIVES OF THE STUDY**

#### **GENERAL OBJECTIVE**

The broad objective is to examine the effect of ethnicity on fertility behaviour in Nigeria.

#### **SPECIFIC OBJECTIVES**

1. To examines the number of living children by ethnic origin.
2. To determine the association between ethnicity and number of living children in Nigeria.
3. To explore the perception of women of different ethnic groups on family size.

## **1.5 HYPOTHESIS OF THE STUDY**

The following hypothesis was tested in the study.

H<sub>0</sub>: There is no relationship between ethnicity and fertility behaviour.

H<sub>1</sub>: There is relationship between ethnicity and fertility behaviour.

## **1.6 JUSTIFICATION**

Various international conferences on population and development, family planning and reproductive health have recommended Programme of Action and set targets for achieving sustainable fertility patterns worldwide. For example, the World Population Conference held at Bucharest in 1974, the 1981 International Conference on Family Planning held in Jakarta, Indonesia; the 1984 Mexico and the 1994 Cairo International Conferences on Population and Development (ICPD) and recently the Millennium Summits reaffirmed 'the right of men and women to be informed and to have access to safe, effective, affordable and acceptable methods of family planning, as well as other methods of their choice for regulation of fertility which are not against the law' (UNFPA, M2004). Nigeria is one of the countries that participated in the forum and adopted the Programme of Action.

However, despite the various recent robust national data sets in Nigeria (NDHS 1999, and 2013 and the 2006 population census). Thus, the impact of the various efforts by the government to implement or achieve the set objectives at the various international meetings on population in the promotion of demographic behavior remains a matter of conjecture in Nigeria demographic discourse.

This study is particularly relevant in the face of social and economic changes that have been taking place in Nigeria. A comprehensive analysis of levels, trends and differentials in fertility behavior as well as how and the extent to which couples in each ethnic group are able to implement their fertility behaviors will add to the body of knowledge on fertility and reproductive health issues in Nigeria. It will also be an indicator of the extent to which available reproductive health programs and services in the country have assisted couples and individuals in each ethnic group to achieve their fertility behaviors. These should assist the government as well as reproductive health programmers in designing appropriate and/or fortifying existing programmed with the aim of improving the level at which people achieve their fertility behaviours and towards the country achieving the set targets.

The main purpose of this study as at the end of the research is to know the exact number of living children by each ethnic group in Nigeria, the association between ethnicity and the number of living children, and also the perception of women of different ethnic groups on family size in Nigeria.



## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 INTRODUCTION**

This chapter focused on review of relevant scholarly work on fertility behaviour and ethnicity differentials in Nigeria. The chapter begins with the introduction to the literature review, followed by Concepts of Ethnicity Differences in Nigeria. Also, the Factors Determining Fertility Behaviour in Nigeria was considered during the literature review. In addition, Factors that Determine the Association between Ethnicity and Number of Living Children in Nigeria were reviewed. The Sub-Group Fertility Behaviour in Nigeria was also put into consideration. The Theoretical Frameworks of Fertility which anchors the Socio-Economic Perspective, Microeconomic Perspective were also reviewed. Finally, the Conceptual Framework was also reviewed in this research work.

#### **2.1 CONCEPT OF ETHNICITY DIFFERENTIAL IN NIGERIA**

The concept of ethnicity as defined by Ukpo disclosed that "ethnic group" is a "group of people having a common language and cultural values". These common factors are emphasized by frequent interaction between the people in the group. In Nigeria, the ethnic groups are occasionally fusions created by intermarriage, intermingling and/or assimilation. In such fusions, the groups of which they are composed maintain a limited individual identity. The groups are thus composed of smaller groups, but there is as much difference between even the small groups; as Chief Obafemi Awolowo put it, as much "as there is different between Germans English,

ethnic groups among which are major ethnic group were Yoruba, Hausa and Igbo or Ibo while some are minority groups, those which do not comprise a majority in the region in which they live. These groups usually do not have a political voice, nor do they have access to resources or the technology needed to develop and modernize economically. They therefore often consider themselves discriminated against, neglected, or oppressed. There are only three ethnic groups which have attained "ethnic majority" status in their respective regions: the Hausa-Fulani in the north, the Ibo in the southeast, and the Yoruba in the southwest. The majority groups, as stated above, are the Hausa-Fulani, Ibo and Yoruba. The first, the Hausa-Fulani, are an example of a fused ethnic group, as they are actually made up of two groups, not surprisingly called the Hausa and the Fulani.

The Hausa are themselves a fusion, a collection of Sudanese peoples that were assimilated, long ago, into the population inhabiting what is now considered Hausaland. They believe in the religion of Islam. Their origin is a matter of dispute: legends trace them back to Canaan, Palestine, Libya, Mecca and Baghdad, while ethnologists hold them to be from the Southern Sahara or the Chad Basin. Once they arrived in Hausa land they became known for setting up seven small states centered around "Birni," or walled cities. In these states the Hausa developed techniques of efficient government, including a carefully organized fiscal system and a highly learned judiciary that gave them a reputation of integrity and ability in administering Islamic law. The Fulani are also Muslims, and, like the Hausa, their origin is more or less an open question. Once a nomadic people, they believe themselves to be descended from the gypsies, Roman soldiers who became lost in the desert, a lost "tribe" of Israel, or other groups such as the



Russians English and Turkish English likewise in Nigeria alone.. there are at least three hundred

relatives of the Britons or the Tuaregs, who inhabit the southern edge of the Sahara in central Africa. Scholars claim that the Fulani are related to the Phoenicians, or place their origin in shepherds of Mauritania that were looking for new pastures. Whatever their origin, the Fulani are known to have arrived in the Hausa states in the early 13th century. Since then they have intermarried with the Hausa, and have mostly adopted the latter's customs and language, although some Fulani decided to stay "pure" by retaining a nomadic life and animist beliefs. The Fulani are most distinctively known for a dispute that developed between them and the local King of Gobir, a spat which developed into a religious war or Jihad ending with a Fulani conquest of the Hausa states(Meek,1925).

The second majority ethnic group is the Ibo, who like the Hausa-Fulani are a synthesis of smaller ethnic groups. In this case the smaller groups are the Onitsha Ibo, the Western Ibo, the Cross River Ibo, and the North-eastern Ibo. According to Okpu, U. (1977), their origins are completely unknown, as they claim to be from about nineteen different places. They do maintain an "indigenous home," however: the belt of forest in the country to the east of the Niger Valley. This home was established to avoid the Fulani's annual slave raids, which were conducted on cavalry that was unable to explore very deeply in the forest. The Ibo thus generally inhabited inaccessible areas, although during the 19th century they began to assert ancestral claims to Nri town, "the heart of the Ibo nationality"(Okpu, U.1977).The Ibo established a society that was fascinating in its decentralization. Their largest societal unit was the village, where each extended family managed its own affairs without being dictated to by any higher authority. Where chiefs existed they held very restricted political power, and only local jurisdiction. The

villages were democratic in nature, as the government of the community was the concern of all who lived in it.

The third ethnic majority group, the Yoruba is like the others made up of numerous smaller collections of people. Those who are identified as Yoruba consider themselves to be members of the Oyo, Egba, Ijebu, Ife, Ilesha, Ekiti or Owu peoples. The Yoruba are united, however, by their common belief in the town of Ife as their place of origin, and the Oni of Ife as their spiritual leader. Their mythology holds that "Oduduwa" created the earth; present royal houses of the Yoruba kingdoms trace their ancestry back to "Oduduwa," while members of the Yoruba people maintain that they are descended from his sons. Yoruba society is organized into kingdoms, the greatest of which was called Oyo and extended as far as Ghana in the west and the banks of the Niger to the east. The Oyo Empire collapsed in 1830 when Afonja, an ambitious governor of the state of Ilorin, broke away but lost his territory to the hired mercenaries of the Fulani. Despite the fact that this event occurred in close temporal proximity to the Fulani Jihad, it was not associated with it.

These three groups comprise only fifty-seven percent of the population of Nigeria. The remainder of the people are members of the ethnic minority groups, which include such peoples as the Kanuri, the Nupe, and the Tiv in the north, the Efik/Ibibio, the Ejaw, and the Ekoi in the east, and the Edo and Urhobo/Isoko to the west, along with hundreds of other groups that differ widely in language, culture and even physique. The specific groups mentioned above are distinct in that they were found, in the 1953 census, to have over one hundred thousand members. As the population of Nigeria has doubled to over seventy-eight million people in 1982 from approximately thirty-one million in 1953, it is safe to assume that these groups are now much

larger (24, AHD p. 1509). We close with a comparison that attempts to portray the difficulties of successfully governing such an incredible variety of people. Aladaniyi, O. B, Bello, A. H, Olopha, P. O and Alabi, O. O. (2013), reported that Nigeria is like the state of Texas in which over three hundred different languages are spoken, and in which the same number of separate cultures desperately try to retain their identity.

## **2.2 FACTORS THAT DETERMINE FERTILITY BEHAVIOUR IN NIGERIA**

According to United Nations Report (2000) whatever reduces or increases fertility level takes place through “the direct operation of various factors affecting the exposure to intercourse and exposure to conception, and through factors affecting pregnancy outcomes and length of the post-partum period. And these variables extend to more remote influences such as education and cultural background such as occupation, age, religion affiliation and so on. Therefore, factors accountable for variation in fertility can be accounted for by these proximate determinants. This implies that differentials and trends of fertility within a country and differences in fertility levels across countries can be directly traced to differences in these proximate variables if it can be assumed that the potential level of fertility is the same in all societies and all factors directly affecting fertility have been fully accounted for. In sum, there are therefore, three factors that determine fertility trends and differentials.

According to Bongaarts (1978) not every factor implicated in fertility is important and directly affects fertility. Some factors are direct while others are not but derived through the direct variables. Those that exact themselves directly on fertility, Bongaarts refer to as the proximate determinants while the indirect ones are the socioeconomic and other background

variables. Proximate determinants of fertility are behavioural and biological factors. It is the knowledge of the proximate determinants that improves the understanding of operation of the socioeconomic variables. What Bongaarts refers to as “proximate” determinants that had been earlier termed “intermediate” determinants (Bongaarts, 1978). By intermediate is meant that these variables stand between socioeconomic conditions and fertility. The decline in fertility could be attributed to an increase in contraceptive prevalence rate (Palamuleni, 2011). Contraceptive prevalence rate has increased from 10.9% per cent in 2003 to 15% in 2013 (NDHS, 2003, 2013). However, although much is known about the demography of Nigeria at national level, little is known about the demographic characteristics of each individual ethnic group in the country. There has been an increase in the number of scholars and policy makers that are interested in ethnic differences in demographic/reproductive outcomes (Dubuc, 2009; Garenne and Zwang, 2006; Zaidi and Reichenbach, 2009).

A major convulsion of Bongaarts (1978) to the understanding of fertility is the development of a model in which three main proximate determinants of fertility could be measured and their relative effects on fertility qualified. In doing this, Bongaarts restricted the factors to be considered to the four most important variables:

1. Marriage (which is only one aspect of exposure to sexual intercourse)
2. Contraception (or exposure to risk of contraception)
3. Abortion (one aspect of gestational outcome and
4. Breastfeeding (the most important determinant of the duration of infecundity following a birth.



Other proximate or intermediate variables such as primary or secondary sterility or infecundity, temporary separation between married couples and other reasons for involuntary abstinence were not considered by Bongaarts because he felt that their fertility impact would not vary greatly across population. Studies have confirmed that most of fertility variation in the majority of countries can be explained by these four factors alone (Bongaarts, 1978; 1982; Bongaarts and Kirmeyer, 1982; Isiugo-Abanihe, 1996). The model developed by Bongaarts expresses the actual level of fertility, (the total fertility rate, TRF) as a function of the fertility-reducing effects of the proximate determinants on a maximum potential level of fertility (the total fecundity rate TF). The equation or the model is summarized as:-  $TFR=Cm.Cc.Ca.Ci.TF$  Where Cm represents the index of marriage, Cc is the index of contraception, Ca is the index of abortion and Ci is the index of postpartum infecundity. The implication is that in any society or group of people where the fertility-reducing effects of the proximate determinants is lower, the outcome will be a higher total fertility rate. Several studies have omitted the index of abortion (Ca) from the model especially in Africa claiming that its effect on fertility in Africa is negligible. This may well be contested, but one must bear in mind that societal laws also affect the smooth operation of the determinants of fertility (Isiugo-Abanihe, 1996), and since our society frowns at abortion, this may well be left out. So utilizing the proximate determinants of fertility model shown above, Isiugo-Abanihe (1996) studied the determinant of fertility in Nigeria. It will be very pertinent to review Isiugo-Abanihe, work here while at the same time pointing to the factors determining fertility differential. In examining marriage as a proximate determinant, he divided the issues into age at first marriage, non-marriage or celibacy, marital disruption and remarriage. He noted in 1996 that the median age at

first marital unions was 17 in Nigeria. This means that half of Nigeria women aged 15-19 have married by the time they are 17 years old.

On his own part, Lightbourne (2007) analysis revealed that there was a positive association between size of place of residence and the proportion of women currently practicing contraception. The association held for all age groups and for all parity levels. The proportion of women at risk and currently practicing contraception was 55% in principal cities, 47% in other urban areas, and 33% in rural areas. His findings also indicated that contraception was widely practiced for the spacing purposes. The percent of women ever using a method. For every 100 ever users there were 70.5 current users in urban areas and 61.3 current users in rural areas. Rural and urban differences in contraceptive use for the 19 countries were compared with rural and urban differences in industrialized countries. The rate of current urban users/100 rural users in industrial countries was 107. Respective rates for the Asian and Pacific region and the Latin American region were 152 and 155. The mean age at first marriage in 1990 was 17.3 while the singular mean age at marriage (an estimate of the mean age at first marriage of those who ever marry) was about 20 years. Note that these generalized statements do conceal significant variations in marriage behaviours among the component parts of the country. For example, "age at a first marriage is higher in urban areas than in rural areas, and among educated women relative to those with little schooling: (Isiugo-Abahihe, 1996:11). Moreover, there is a substantial ethnic variation in age at marriage in Nigeria, with a pattern of very early marriage among the Hausa/Fulani (mean age at first marriage less than 15 years), and fairly late marriage among the Yoruba and the Igbo (mean age at first marriage higher than 19 years).

### **2.3 FACTORS THAT DETERMINE THE ASSOCIATION BETWEEN ETHNICITY AND NUMBER OF LIVING CHILDREN IN NIGERIA.**

Fertility studies in Nigeria date back to decades and have examined a wide range of topics on fertility though mostly at local geographical areas. These include trends (Van De Walle, 1965 among others), determinants and differentials, adolescents' reproductive health (Otoide, Oronsaye&Okonofua, 2001; Adeboyejo&Onyeonoru, 2003), family planning (Renne, 1996; Lacey, Adeyemi&Adewuyi, 1997; Odimegwu, 1999), abortion (Makinwa-Adebusoye, Singh &Andaru, 1997), poverty and fertility dynamics (Odusola, 2002); the relationship between child labour and fertility preferences of parents (Togunde and Newman, 2005) and a host of others.

Different studies have shown the trends of fertility in estimates of total fertility rate (TFR) in Nigeria for the years 1965, 1970, 1971-73 and 1975 to be 6.6, 6.5, 7.3 and 7.0 children respectively. This generally implies a rise between 1965 and 1975. The 1981/82 Nigeria Fertility Survey put the TFR at 5.94 while the 1990, 1999 and 2003 NDHS put the estimates at 6.01, 5.2 and 5.7 respectively (NDHS, 2003; Feyisetan&Bankole, 2002). It is evident that the TFR has followed a downward trend after the 1970s if one ignores the figure given by the 1999 NDHS, which was reported to have been affected by underreporting of births (NDHS, 2003). Some favourable indicators for future fertility decline in Nigeria have also been alluded to. These include: decline in wanted fertility; increase in age at marriage; increase in contraceptive use, increase in the rate of abortion (even though this is illegal); erosion of social values placed on child bearing; increase in female enrolment at all levels of education as well as increasing participation of women in the labour force (Oladosu, 2001; Feyisetan&Bankole, 2002).

The studies that have examined the determinants of fertility at the national level show that postpartum infecundability accounts for most of the reduction in total fecundity. This is followed by marriage delay and contraceptive use. There are however considerable regional and socio-economic variations in the country (Adegbola, 1981; Akinkunmi, 1989; Isiugo-Abanihe, 1996). This variation is clearly manifested in a study of the proximate determinants of fertility of a Nigerian ethnic group, the Igbo, by Odimegwu&Zerai (1996). While the factors that have the most inhibiting effect on fertility in this ethnic group remain basically the same as those at the national level, their importance is somehow reversed. For this sub group, the main fertility-inhibiting factors are marriage, use of contraception and post-partum infecundability due to post-partum amenorrhea, in that order. Another example of these variations is the one found within unions. The inhibiting effect of marriage was found to differ by type and stability of marriage (Feyisetan&Togunde, 1988; Isiugo-Abanihe, Ebigbola&Adewuyi, 1993; Isiugo- Abanihe, 1999). Although fertility preference studies have been limited in Nigeria, it is rich in content and diversity (in terms of coverage and study population). The 1987 study by McCarthy & Oni examined the determinants of desired family size among urban women in a South- Western city of Nigeria; Bankole (1995) studied couples preferences and their subsequent fertility also in the South Western part of the country while Isiugo-Abanihe (1994) examined the reproductive motivation and family size preferences among Nigerian men.

Questions on fertility preferences are often responded to with non-numeric answers. This is rooted in cultural and religious beliefs as people are expected to leave their destiny wholly in the hands of their creator. This was the focus of the study by McCarthy & Oni (1987), where they examined the determinants of desired family size between women who express numerical and

those who expressed non-numerical responses. Non-numeric responses were found to be common among young women, women with fewer children, women residing in low socio-economic area, women in polygamous marriages, Muslim women and women with no education. Bankole (1995) in his own study brought forth the strong influence of men on fertility decisions, which cannot be ignored or captured by proxy information from the wives. He found that fertility desires of both marriage partners are important predictors of the couple's fertility and that the desires of both spouses have equal effects on fertility behaviour. The husband's desire is however dominant in predicting couple's behaviour when the number of living children is small while the wife's desires become more important during the later stages of marriage. This in effect means that family size governs which spouse's fertility preference prevails (Hollander, 1996). The Isiugo-Abanihe (1994) study however shows that preference for large family is very strong among Nigerian men (who generally decide and dictate what happens within and around the family) although there are considerable ethnic and religious variations. For example, average number of children desired is 4.90 among the Yoruba and the Igbo while it is 6.09 and 7.34 among the Hausa/Fulani and the Ishan respectively. Similarly, average number of children desired is 6.20 for the Muslims, 5.45 for the Catholics, 4.97 for the Protestants and 6.04 among the people who hold indigenous belief.

#### **2.4 SUB-GROUP FERTILITY BEHAVIOUR IN NIGERIA**

Published studies have offered several hypotheses and explanations for the persistence of high fertility levels in developing countries. The factors identified include the loss of focus on family planning programs in the development agenda of these countries following new health challenges, such as HIV/AIDS (McNicoll, 2011; Agyei-Mensah, 2007), the impact of HIV/AIDS

epidemic on infant and child mortality (Westoff& Cross, 2006; Moultrie et al., 2008), changes in proximate determinants of fertility and changing attitudes towards family size preferences and family planning (Bongaarts, 2002, 2006, 2008; Westoff& Cross, 2006), and changes in levels of contraceptive use and socio-economic development, as reflected in changes in women's education, infant and child mortality and real per capita economic growth (McNicoll, 2011; Bongaarts, 2006; Westoff and Cross, 2006; Shapiro and Gebreselassie, 2008). In Kenya, Westoff and Cross (2006) illustrated differentials in fertility outcomes by showing that the course of fertility varies between subgroups with certain socio-economic characteristics. Ezeh et al. (2009) confirmed these differentials for four countries in eastern Africa.

A previous analysis in Nigeria by Reed and Mberu, (2015) suggested similar differentials, with variations in fertility outcomes identified across geopolitical zones, education, household wealth and place of residence. The North East (TFR 6.3) and North West (TFR 6.7) geopolitical zones of Nigeria (predominantly Muslim and populated by Hausa, Fulani and Kanuri ethnic groups) have pre-transition TFRs. The TFR rates for these two zones increased between 2003 and 2008, and decreased marginally in 2013. All of the geopolitical zones in the southern part of Nigeria (predominantly Christian and populated by Yoruba, Igbo, and other ethnic groups) experienced "stalled fertility declines" between 2003 and 2008 and again between 2008 and 2013. The southern zones have current TFRs ranging between a low of 4.3 (South South) and a high of 4.7 (South East), which is over two children per woman lower than the TFR of the two core northern zones. Since 2003, the North Central zone has had a TFR that is lower than that of the other northern zones, but which is still, on average, a child higher than the TFR of the

southern zones in NDHS 2003, 2008 and 2013 (National Population Commission and ICF Macro, 2009; National Population Commission and ICF International, 2014).

Other quantitative and qualitative studies have identified ethnicity and religion as significant determinants of reproductive behaviour and fertility outcomes, particularly in some parts of northern Nigeria. A recent qualitative study (2007–2008) implemented in the States of Kano and Jigawa found that fertility is a key socio-political, cultural and economic resource in the region. The same study identified several factors that contribute to the continued high fertility levels there, such as the Koranic inheritance doctrine (which engenders childbearing competition among co-wives in mostly polygamous households) and the depiction of contraceptives as against Islamic doctrine and injurious to women's health in dominant local religious and cultural discourses (Izugbara et al., 2009).

Apart from perspectives anchored in religion, other explanations of drivers of fertility in northern Nigeria include the young age at which most women continue to marry, polygyny and divorce, confusion regarding expectations surrounding spousal communication on fertility and reproduction, the marked high status attached to having large families, the persistent unavailability of contraceptives and trustworthy family planning providers (especially in rural and semi-rural areas), and the general lack of adequate and comprehensive information on contraceptives in the region (McNicoll, 2011; Population Council, 2007; Smith, 2004; Obono, 2003). Despite widespread pro-natalist beliefs and opinions, it is important to note the existence in northern Nigeria of a contrary perspective that supports fertility regulation. This perspective holds that because Islam recognizes the centrality of the family to social life, matching family

size with economic resources is a key to rearing children who will not bring disrepute to the Islamic religion (Izugbara et al., 2009).

## **2.5 THEORETICAL FRAMEWORKS OF FERTILITY**

There are a number of theories used to explain fertility behaviour. These have looked at fertility from different disciplinary and methodological perspectives. These include general socio-economic studies (identified with sociology and social demography), the psychosocial and microeconomics of fertility approaches (identified with psychology and economics respectively). The socio-economic and microeconomic theories was used in this study.

### **2.5.1 SOCIO-ECONOMIC PERSPECTIVE**

In the socio-economic studies, fertility is traditionally arrayed against one or more explanatory variables both at macro and micro levels. The interpretation of the results from these analyses was improved upon by incorporating proximate determinants in the analysis. With the insertion of a new stage in the sequence, fertility is then seen as determined directly by a set of 'proximate determinants' with the background variables (social, economic, cultural, health and environmental factors) in turn were operating only indirectly on fertility through these determinants. These 'proximate determinants' comprise factors such as the extent of exposure to intercourse (marriage patterns), fecund ability (including frequency of intercourse), duration of postpartum in fecund ability, spontaneous intrauterine mortality, sterility and use of deliberate fertility control (contraception and induced abortion). The intermediate variables allow the identification of the pathways through which different socio-economic variables affect fertility (Davis & Blake, 1956; Bongaarts, 1978; Bongaarts & Potter, 1983; Odimegwu, 1996).



The Bongaarts (1978) version, which was built on the work of Davis and Blake (1956), has been used for a variety of purposes. These include: decomposition of the contribution of each of the proximate determinants to the realization of the current level of the total fertility rate and analyzing the contribution of changes in the proximate determinants to changes in the total fertility rate over time. Others are: comparing the differences in fertility between countries or regions on the basis of differences in the proximate determinants as well as projecting future levels of contraceptive use that would be required to achieve fertility goals given expected changes in the other proximate determinants or future levels in the fertility given expected or desired changes in contraceptive use.

The Bongaarts (1978) framework is one of the most widely used tools in fertility analysis and has influenced the collection and reporting of fertility data. As a result, a large amount of additional data on the proximate determinants is now available, which presents the opportunity to refine the proximate determinants indices (Stover, 1998). Using this framework (with a little modification to the marriage index), Jolly & Gribble (1993) in their analysis of twelve Sub-Saharan African countries' DHS datasets, found that contraceptive use in Sub-Saharan Africa is fairly low and that fertility and its determinants have changed over time. They also found that primary sterility of women in the developing countries is much lower than the 3% estimate given by Frank (1983).

The shortcoming of the Bongaarts (1978) formulation, however, is that it assumes that all fertility occurs within marriage or union, which is not necessarily the case in many parts of the world (including Nigeria). Hence this study will use (and make a comparison of) both the Bongaarts formulation and its Stover's (1998) refinement in the estimation of the inhibiting

effect of the proximate determinants variables on fertility. Stover uses recently sexual active women as the base population since it represents exposure to conception than marriage. Availability of data on abortion is also a problem especially in Sub-Sahara Africa to operationalize the formulation in full (Jolly & Gribble, 1993; Stover, 1998).

### **2.5.2 MICROECONOMIC PERSPECTIVE**

The microeconomics approach to the study of fertility determinants focuses more on the economic dimension of fertility choice. The conventional theory of consumer behaviour views the individual as trying to maximize satisfaction, given a range of goods, their prices, and his/her own tastes and income (Becker, 1960; Easterlin, 1975; Beaujot, Krotki & Krishnan, 1978; Montgomery, 1987; Bongaarts, 1993; Shapiro, 1997; Robinson, 1997). Basic to the theory is the proposition that children are a special kind of capital goods and fertility is seen as a response to the consumer's demand for children relative to other goods. The model presumes that couples would have, as many children as they could if doing so were costless in terms of money, time and foregone opportunities. However, why fertility fell as income increases in the course of demographic transition led to the inclusion of the concept of child quality by Becker (1965) in the economic model.

A more comprehensive treatment of the production of children to the microeconomic theory of fertility was introduced by Easterlin (1975). This model incorporated Becker's earlier work, which focused on the demand for children. At the same time, Easterlin (1975) sought to develop a model that would be compatible with the approaches to fertility used in other disciplines (Shapiro, 1997). Thus, a sociological variable (the subset of 'proximate determinants' relating to

deliberate fertility control) was added. He proposed that the determinants of fertility are seen as working through one or more of the following: the demand for children, the potential output of children and the costs of fertility regulation, including both subjective (psychic) and objective (time and money required to learn about and use of specific techniques) costs.

The dependent variable is measured by the total number of surviving children couples will have at the end of the reproductive span of the wife. Demand is measured as the number of surviving children parents would want if fertility regulation were costless while potential output was the number of surviving children parents would have if they did not deliberately limit fertility. The framework was used to show how modernization leads to a shift from high to low fertility as described by the demographic transition theory (Easterlin, 1975). Jejeebhoy (1978) adopted the Easterlin framework in a study where she considered whether the regulating subpopulation might be distinguished from the natural fertility subpopulation primarily on the basis of a higher potential number of surviving children, or on a lower desired family size, or on the basis of lower costs associated with fertility regulation. She found that at the early stages of fertility transition in Taiwan, the regulating subpopulation may be distinguished from the natural fertility subpopulation on the basis of their higher levels of natural fertility and lower infant and child mortality. Also, on the basis of their more favourable attitudes toward and awareness of fertility regulation rather than on the basis of desired family size, which remained uniform for both subpopulations. She submitted that time series data is more appropriate in order to test the relative roles of natural fertility and desired fertility (between the natural and regulating subpopulations) in the pattern of the fertility transition.

The Easterlin framework has been criticized for the unsuitability of the dependent variable in macro level analysis (Bongaarts, 1993). The number of living children which is the outcome variable is rarely used in macro level demographic studies of fertility levels, trends and differences. Total fertility rate (TFR) is preferred at macro level analysis, which is not easily related to the number of surviving children. Another criticism of the model is that it is cohort-based in the reproductive experience of women as the rate of childbearing and the supply and demand are measured at the end of the childbearing years, hence refer to the past experience over the reproductive life cycle of a cohort of women. Also, it does not capture rapid recent changes in fertility behaviour, which are now occurring in many developing countries. The model is also faulted for its assumption of fixed demand for children (this is assumed to be determined at the time of marriage and to remain constant throughout the childbearing years). This could be problematic where changing socio-economic conditions lead couples to revise their demand for children. Finally, the model does not propose a convenient equation that relates the dependent variable to the independent variables, which makes it difficult to quantify the role of each independent variable in observed changes in the rate of childbearing accurately (Mchenry, 1984; Montgomery, 1987; Bongaarts, 1993; Ibisomi, 2002; Ibisomi, Odimegwu, Otieno and Kimani, 2005).

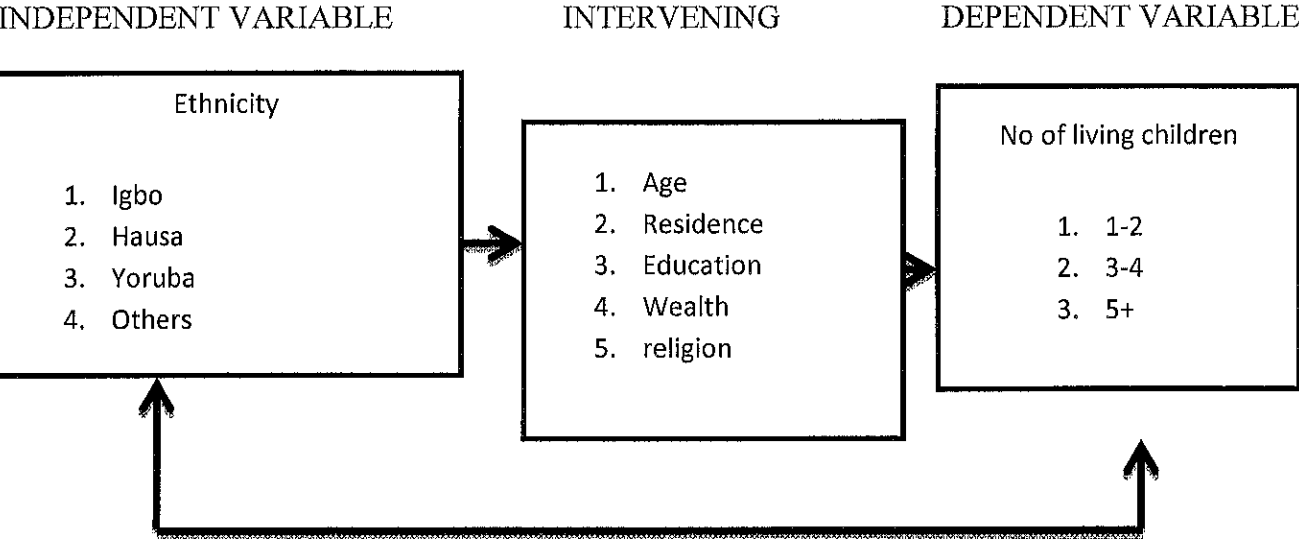
An alternative approach to the implementation of Easterlin's model was proposed by Bongaarts (1993). In the framework, Bongaarts asserts that child mortality influences demand and not supply of children as past mortality experiences as well as risks of future child mortality are usually taken into account by couples before arriving at a desired family size. It posits that fertility (F) as measured by total fertility rate is an outcome of the interaction of supply of births

(natural fertility), demand for births (wanted fertility) and degree of fertility preference implementation. The degree of preference implementation is in turn dependent on cost of fertility regulation and that of unwanted childbearing.

This variant differs from the original Easterlin formulation in three ways: it measures reproductive performance, supply and demand in terms of births; it is period based and it introduced a new variable, ‘the degree of preference implementation’ (this index gives the extent to which people are able to implement their fertility preferences) to quantify the roles of the costs of fertility regulation and unwanted childbearing. A procedure for decomposing fertility trends between two surveys to determine the relative role of each of the determinants to fertility changes was also proposed.

**2.6 CONCEPTUAL FRAMEWORK**

This conceptual framework is drawn to show the relationship between the independent and dependent variable.



Source: Author work, 2016

## **CHAPTER THREE**

### **3.0 INTRODUCTION**

This chapter focuses on the various techniques and procedures used in carrying out this research work. It provides relevant information on the following: description of the study area, study design, sample size, sources of data, data processing and analysis and measurement of variables.

### **3.1 DESCRIPTION OF THE STUDY AREA**

Nigeria lies on the west coast of Africa between latitudes 4°16' and 13°53' north and longitudes 2°40' and 14°41' east. It occupies approximately 923,768 square kilometres of land stretching from the Gulf of Guinea on the Atlantic coast in the south to the fringes of the Sahara Desert in the north. The territorial boundaries are defined by the republics of Niger and Chad in the north, the Republic of Cameroon on the east, and the Republic of Benin on the west. Nigeria is the most populous country in Africa and the 14th largest in land mass (World Bank, 2012)

Nigeria as a Federal Republic, is a federal constitutional republic comprising of 36 states and its Federal Capital Territory, Abuja. These states are subdivided into 774 Local Government Areas (LGAs). Furthermore, the states are regrouped by geographical location to form six zones which are North Central, North -East, North-West, South-East, South-South, and South-West. Nigeria is located in West Africa and shares land borders with the Republic of Benin in the west, Chad and Cameroon in the east, and Niger in the north

The country's 2006 Population and Housing Census placed the country's population at 140,431,790 and it is projected to reach 192 million at the end of 2015 (PRB, 2013). Nigeria has great geographical diversity, with its topography characterized by two main land forms: lowlands and highlands. The uplands stretch from 600 to 1,300 meters in the North Central and the east highlands, with lowlands of less than 20 meters in the coastal areas. The lowlands extend from the Sokoto plains to the Borno plains in the North, the coastal lowlands of western Nigeria, and the Cross River basin in the east. The highland areas include the Jos Plateau and the Adamawa Highlands in the north, extending to the Obudu Plateau and the Oban Hills in the southeast. Other topographic features include the Niger-Benue Trough and the Chad Basin.

The ethnicity of Nigeria is so varied that there is no definition of a Nigerian beyond that of someone who lives within the borders of the country (Ukpo, p. 19). The boundaries of the formerly English colony were drawn to serve commercial interests, largely without regard for the territorial claims of the indigenous peoples. As a result, about three hundred ethnic groups comprise the population of Nigeria, and the country's unity has been consistently under siege: eight attempts at secession threatened national unity between 1914 and 1977. The Biafran War was the last of the secessionist movements within this period.

The concept of ethnicity requires definition. Ukpo calls an "ethnic group" a "group of people having a common language and cultural values". These common factors are emphasized by frequent interaction between the people in the group. In Nigeria, the ethnic groups are occasionally fusions created by intermarriage, intermingling and/or assimilation. In such fusions, the groups of which they are composed maintain a limited individual identity. The groups are thus composed of smaller groups, but there is as much difference between even the small groups;

as Chief Obafemi Awolowo put it, as much "as there is between Germans, English, Russians and Turks".

The count of three hundred ethnic groups cited above overwhelmingly enumerates ethnic minority groups, those which do not comprise a majority in the region in which they live. These groups usually do not have a political voice, nor do they have access to resources or the technology needed to develop and modernize economically. They therefore often consider themselves discriminated against, neglected, or oppressed. There are only three ethnic groups which have attained "ethnic majority" status in their respective regions: the Hausa-Fulani in the north, the Ibo in the southeast, and the Yoruba (Soyinka's group) in the southwest.

We must be very careful to avoid the use of the term "tribe" to describe these ethnic groups. "Tribe," Ukpo points out, is largely a racist term. The Ibo and Hausa-Fulani of Nigeria are each made up of five to ten million people, a figure comparable to the number of, say, Scots, Welsh, Armenians, Serbs or Croats. Yet we do not refer to the latter groups as "tribes." The term "tribe" is almost exclusively, and very indifferently, applied to peoples of Native American or African origin. It is a label which emerged with imperialism in its application to those who were non-European and lived in a "colonial or semi-colonial dependency...in Asia, Africa and Latin America". As we are attempting to discard the prejudices of imperialism it is in our best interests to discard the use of the term "tribe" when referring to the ethnic groups of Nigeria. With that in mind, we should dabble in brief definitions of the major ethnic groups of Nigeria. The majority groups, as stated above, are the Hausa-Fulani, Ibo and Yoruba. The first, the Hausa-Fulani, are an example of a fused ethnic group, as they are actually made up of two groups, not surprisingly called the Hausa and the Fulani.



The Hausa are themselves a fusion, a collection of Sudanese peoples that were assimilated, long ago, into the population inhabiting what is now considered Hausa land. They believe in the religion of Islam. Their origin is a matter of dispute: legends trace them back to Canaan, Palestine, Libya, Mecca and Baghdad, while ethnologists hold them to be from the Southern Sahara or the Chad Basin. Once they arrived in Hausa land they became known for setting up seven small states centered around "Birni," or walled cities. In these states the Hausa developed techniques of efficient government, including a carefully organized fiscal system and a highly learned judiciary, that gave them a reputation of integrity and ability in administering Islamic law.

The Fulani are also Muslims, and, like the Hausa, their origin is more or less an open question. Once a nomadic people, they believe themselves to be descended from the gypsies, Roman soldiers who became lost in the desert, a lost "tribe" of Israel, or other groups such as the relatives of the Britons or the Tuaregs, who inhabit the southern edge of the Sahara in central Africa. Scholars claim that the Fulani are related to the Phoenicians, or place their origin in shepherds of Mauritania that were looking for new pastures. Whatever their origin, the Fulani are known to have arrived in the Hausa states in the early 13th century. Since then they have intermarried with the Hausa, and have mostly adopted the latter's customs and language, although some Fulani decided to stay "pure" by retaining a nomadic life and animist beliefs. The Fulani are most distinctively known for a dispute that developed between them and the local King of Gobir, a spat which developed into a religious war or Jihad ending with a Fulani conquest of the Hausa states.

The second majority ethnic group is the Ibo, who like the Hausa-Fulani are a synthesis of smaller ethnic groups. In this case the smaller groups are the Onitsha Ibo, the Western Ibo, the Cross River Ibo, and the North-eastern Ibo. Their origins are completely unknown, as they claim to be from about nineteen different places. They do maintain an "indigenous home," however: the belt of forest in the country to the east of the Niger Valley. This home was established to avoid the Fulani's annual slave raids, which were conducted on cavalry that was unable to explore very deeply in the forest. The Ibo thus generally inhabited inaccessible areas, although during the 19th century they began to assert ancestral claims to Nri town, "the heart of the Ibo nationality".

The Ibo established a society that was fascinating in its decentralization. Their largest societal unit was the village, where each extended family managed its own affairs without being dictated to by any higher authority. Where chiefs existed they held very restricted political power, and only local jurisdiction. The villages were democratic in nature, as the government of the community was the concern of all who lived in it.

The third ethnic majority group, the Yoruba, is like the others made up of numerous smaller collections of people. Those who are identified as Yoruba consider themselves to be members of the Oyo, Egba, Ijebu, Ife, Ilesha, Ekiti or Owu peoples. The Yoruba are united, however, by their common belief in the town of Ife as their place of origin, and the Oni of Ife as their spiritual leader. Their mythology holds that "Oduduwa" created the earth; present royal houses of the Yoruba kingdoms trace their ancestry back to "Oduduwa," while members of the Yoruba people maintain that they are descended from his sons. Yoruba society is organized into kingdoms, the greatest of which was called Oyo and extended as far as Ghana in the west and the banks of the

Niger to the east. The Oyo empire collapsed in 1830 when Afonja, an ambitious governor of the state of Ilorin, broke away but lost his territory to the hired mercenaries of the Fulani. Despite the fact that this event occurred in close temporal proximity to the Fulani Jihad, it was not associated with it.

These three groups comprise only fifty-seven percent of the population of Nigeria. The remainder of the people are members of the ethnic minority groups, which include such peoples as the Kanuri, the Nupe, and the Tiv in the north, the Efik/Ibibio, the Ejaw, and the Ekoi in the east, and the Edo and Urhobo/Isoko to the west, along with hundreds of other groups that differ widely in language, culture and even physique. The specific groups mentioned above are distinct in that they were found, in the 1953 census, to have over one hundred thousand members. As the population of Nigeria has doubled to over seventy-eight million people in 1982 from approximately thirty-one million in 1953, it is safe to assume that these groups are now much larger (24, AHD p. 1509).

We close with a comparison that attempts to portray the difficulties of successfully governing such an incredible variety of people. Nigeria is an area the size of the state of Texas in which over three hundred different languages are spoken, and in which the same number of separate cultures desperately try to retain their identity. You can only imagine the ensuing chaos. The purpose of this study is to investigate the effect of ethnicity on fertility behaviour, to examine the level of children ever born by ethnic origin and to determine the association ethnicity and number of children ever born in South-west Nigeria.

### 3.2. SAMPLE DESIGN

All women age 15-49 who would be either permanent residents of the households in the 2013 NDHS sample or visitors present in the households on the night before the survey would be eligible to be interviewed. In a subsample of half of the households, all men age 15-49 that would be either permanent residents of the households in the sample or visitors present in the households on the night before the survey would be eligible to be interviewed.

The 2013 Nigeria Demographic and Health Survey (NDHS) is the fifth DHS in Nigeria, following those implemented in 1990, 1999, 2003, and 2008. A nationally representative sample of 40,320 households from 904 primary sampling units (PSUs) was selected. All women age 15-49 who were usual members of the selected households or who spent the night before the survey in the selected households were eligible for individual interviews. As with previous NDHS surveys, the main objective of the 2013 NDHS was to provide reliable information on fertility and fertility preferences, knowledge and use of family planning methods, maternal and child health, childhood and adult mortality levels, knowledge of and attitudes toward HIV/AIDS and other sexually transmitted infections (STIs), women's empowerment and domestic violence, and knowledge about other illnesses. The survey was designed to produce reliable estimates for key indicators at the national level as well as for urban and rural areas, each of the country's six geographical zones, and each of the 36 states and the Federal Capital Territory (FCT). In addition to the female survey, a male survey was conducted at the same time in every second household selected for the female survey. In these households, all men age 15-49 who were usual members of the selected households or spent the night before the survey in the selected households were eligible for individual interviews. The survey collected information on their

basic demographic status and their knowledge of and attitudes toward HIV/AIDS and other STIs. The sample for the 2013 NDHS was a stratified sample, selected independently in three stages from the sampling frame. Stratification was achieved by separating each state into urban and rural areas. In the first stage, 893 localities were selected with probability proportional to size and with independent selection in each sampling stratum.

In the second stage, one EA was randomly selected from most of the selected localities with an equal probability selection. In a few larger localities, more than one EA was selected. In total, 904 EAs were selected. After the selection of the EAs and before the main survey, a household listing operation was carried out in all of the selected EAs. The household listing consisted of visiting each of the 904 selected EAs, drawing a location map and a detailed sketch map, and recording on the household listing forms all occupied residential households found in the EA with the address and the name of the head of the household. If a selected EA included less than 80 households, a neighbouring EA from the selected locality was added to the cluster and listed completely. The resulting list of households served as the sampling frame for the selection of households in the third stage.

In the third stage of selection, a fixed number of 45 households were selected in every urban and rural cluster through equal probability systematic sampling based on the newly updated household listing.

### **3.3. SAMPLE SIZE**

The study population will be based on women of reproductive ages 15-49 in Nigeria who must at least have one life birth at the time of the survey.

### 3.4. SOURCE OF DATA

Both Primary and Secondary data sources will be used. Data collection method will be by quantitative method and it is basically secondary data from 2013 Nigeria Demographic Health Survey (NDHS). To complement the Secondary data, An In-depth Interview (IDI) will be carried out among women (15-49 years) who have at least one live birth; this will generate the data for the primary source. An interview guide with open-ended questions will be used to conduct the In-depth Interview (IDI).

### 3.5 INDEPENDENT VARIABLES

The Independent variables are measured as follows:

**Ethnicity:** Is measured in four categories; Yoruba, Igbo, Hausa and others

**Age of Women:** This is a nominal variable, it will be measured from the NDHS using the grouped age of respondents in five year age group 15-19, 20-24, 25-29, 30-34, 35-39, 40-44 and 45-49

**Place of Residence:** It is divided into two (2) categories; Rural and Urban.

**Level of Education:** Is a categorical variable divided into four categories; No Education, Primary Education, Secondary Education and Higher Education.

**Religion:** Is measured in three categories; Christian, Islam, Traditional.

**Wealth Index:** Is a categorical variable divided into three categories; Poor, Middle, Rich.

**Employment Status:** Is measured using women current working status.

### **3.6 DEPENDENT VARIABLE**

Children ever born (0-4, 5+)

### **3.7 DATA PROCESSING AND ANALYSIS**

The NDHS datasets from 2013 women recode, processed and analyzed using STATA application package (STATA 12.0). The data processing will be necessary before the proper analysis in order to measure the variables in this study accurately as well as to make the analysis well presentable and easily interpretable. The tools for data manipulation would be employed on the STATA application package to achieve this task. Univariate analysis in this study will be carried out using tables of frequency distribution to describe the background characteristics of the respondents and. Bivariate analysis will be done using the chi-square ( $\chi^2$ ) to show the association among children ever born, ethnicity and other various socio economic and demographics background characteristics that are categorical variables. Furthermore, Poisson regression will be used in the multivariate analysis to determine the strength of association and identify predictors of children ever born in the study area.

## CHAPTER FOUR

### 4.0 DATA PRESENTATION AND ANALYSIS OF RESEARCH FINDINGS

This chapter focuses on the presentation of data analysis of research work on ethnicity differential in fertility behaviour in Nigeria.

This study examined selected variables such as socio-economic characteristics of the women-age, religion, level of education, wealth index, occupation by ethnicity and fertility behaviour. The analysis of the study was done in line with the research questions and hypothesis raised for this project work. All the research questions were analysed using simple percentage while the hypotheses were tested at 0.05 level of significance. The Pearson Chi-square and logistic regression statistical techniques were employed for data analysis.

#### 4.1. Research Question 1 what is the Average number of children ever born by ethnic group

**Table 1: Socio-Demographic Characteristics of respondents by Ethnic Group**

Background Characteristics	Ethnic Group			
	others	Yoruba	Hausa	Igbo
<b>Average Total Children Born</b>	2.8	2.3	4.0	2.4
<b>Children Ever Born</b>				
1-2 children	33.84	35.77	26.04	33.85
3-4 children	27.96	38.13	23.31	29.33



5+	38.2	26.1	50.65	36.82
<b>Ideal Children</b>				
Children	2.05	3.54	0.73	1.57
Children	29.75	63.47	5.73	36.4
5+	68.2	32.99	93.54	62.03
<b>Contraceptive use</b>				
Not Using	84.06	65.19	98.29	71.75
Using	15.94	34.81	1.71	28.25
<b>Wealth</b>				
Poor	38.65	3.46	63.38	13.59
Moderate	22.47	10.78	16.84	20.86
Rich	38.88	85.76	19.77	65.55
<b>Education Attainment</b>				
No Education	34.22	4.14	72.74	4.58
Primary	19.45	18.28	11.93	19.01
Secondary	37.71	58.09	13.69	58.83
Higher	8.61	19.49	1.65	17.58
<b>Partner Education Attainment</b>				
No Education	36.21	5.86	64.8	7.76
Primary	17.28	19.46	14.38	34.36
Secondary	30.43	48.91	13.04	42.07
Higher	15.58	25.49	7.05	15.33

Don't Know	0.5	0.28	0.73	0.48
<b>Age of Respondents</b>				
15-24	40.23	34.63	37.58	36.07
25-34	32.30	32.74	32.59	32.75
35+	27.47	32.63	29.83	31.18
<b>Occupation</b>				
Not Working	38.65	26.26	39.95	33.95
Working	61.35	73.74	60.05	66.05

**Source: NDHS, 2013**

The percentage differential in distribution of sampled respondents revealed that Hausa has the highest fertility behaviour with average total children ever born of 4 .0 children while the ethnic with lowest average children ever born children was from Yoruba (2.3 children). The results disclosed that majority of Yoruba ethnic group had given birth to 3-4 children while more than half of sampled Hausa respondents had given birth to 5+children, but the fertility behaviour of Igbo ethnic group revealed that more than one-third of sampled women had given birth to 5+ children.

It was found that contraceptive usage was very low in all of the ethnic groups in Nigeria as most of the ethnic groups have highest of non- use while the highest usage is found in Yoruba Ethnic group (34%) while the least is from the Hausa ethnic group(1.71%). The wealth index of women in this study disclosed an interesting results as most of the Yoruba ethnic group were categorized as rich and the Hausa ethnic groups more than half were classified as poor people

while the Igbo almost 70% of the women were categorized as rich and other ethnic group were classified as rich too.

The Hausa ethnic group was also found to have highest level of illiteracy as majority of the women has no education while the level of no education in Yoruba and Igbo was a single unit proportion has most of the women possess higher educational qualification at least secondary education were common among them. Also the spouse of sample respondents disclosed that most of Hausa/Fulani partner has no basic education whereas other ethnic group has most of them possesses secondary education as in most of partners of Yoruba , Igbo and other ethnic groups have their highest proportion of educational attainment to be in secondary education. Also it was found that most of the respondents were engaged in economic activities as more three-quarters were working among the Yoruba ethnic groups while Hausa/Fulani have 60.05% who were working, Igbo (66%) were working and 61.35% were working in other ethnic groups.

#### **4.2 TEST OF ASSOCIATION**

The second objective seeking to examine the association between ethnicity and fertility behaviour of women revealed interesting results as it was found that women contraceptive use, their occupational and educational status as well as their perception to family size form the key factors in determining fertility differences among ethnic group. *See details in table below.*

**Table2: Differential in Contraceptive usage and Women Fertility Behaviour**

Contraceptive Usage	Fertility Behaviour			Chi-Square
	1-2 children	3-4children	5+	
<b>Pooled</b>	32.07	26.26	41.67	$X^2 = 111.7110$ Pr = 0.000
Not using				
Using	28.26	34.18	37.55	
Total	31.42	27.6	40.97	
<b>Others Ethnicity</b>				
Not using	33.64	26.95	39.41	$X^2 = 5.8291$ Pr = 0.054
Using	31.93	29.7	38.37	
Total	33.37	27.37	39.25	
<b>Yoruba</b>				
Not using	40.32	34.06	25.63	$X^2 = 66.8233$ Pr = 0.000
Using	26.83	42.04	31.13	
Total	34.9	37.26	27.84	
<b>Hausa</b>				
Not using	26.12	22.95	50.93	$X^2 = 7.2808$ Pr = 0.026
Using	17.09	28.48	54.43	
Total	25.92	23.07	51.01	
<b>Igbo</b>				
Not using	36.22	26.38	37.4	$X^2 = 35.2940$ Pr = 0.000

Using	25.52	31.92	42.56	
Total	32.94	28.07	38.98	

**Source: NDHS, 2013**

The pooled results of contraceptive use among the sampled respondent disclosed that most of the respondents who were not using had 5+ children (41.67%) while those using also had 5+ children this has a significant relationship as chi-square value ( $X^2 = 111.7110$  Pr = 0.000) which has a significant relationship. Furthermore, majority of those who uses contraceptives among Yoruba ethnic groups had 3-4 children while those not using had 1-2 children but on the other hand, most women who were not using contraceptives and those using has 5+ children in both Hausa/Fulani (50% and 54%) and Igbo ethnic group(37.4% and 42.56%) with respective chi-square results of ( $X^2= 7.2808$ , Pr = 0.026) and ( $X^2= 35.2940$  Pr = 0.000). This result therefore shows that contraceptive use has effect of fertility behaviour of women in Nigeria.

**Table3: Differential in occupation and Women Fertility Behaviour**

	Fertility Behaviour			
Occupation	1-2 children	3-4children	5+	Chi-Square
<b>Pooled</b>				
Not working	44.24	24.3	31.46	$X^2 = 661.8802$ Pr = 0.000
Working	27.13	28.71	44.16	
Total	31.42	27.6	40.97	
<b>Other group</b>				

Not working	44.45	24.66	30.89	$X^2 = 253.5537$ Pr = 0.000
Working	29.1	28.42	42.48	
Total	33.37	27.37	39.25	
<b>Yoruba</b>				
Not working	71.09	20.31	8.59	$X^2 = 161.8330$ Pr = 0.000
Working	32.02	38.61	29.37	
Total	34.9	37.26	27.84	
<b>Hausa</b>				
Not working	37.08	24.29	38.63	$X^2 = 272.6748$ Pr = 0.000
Working	20.5	22.48	57.02	
Total	25.92	23.07	51.01	
<b>Igbo</b>				
Not working	60.8	24.14	15.06	$X^2 = 258.7571$ Pr = 0.000
Working	27.07	28.91	44.03	
Total	32.94	28.07	38.98	

**Source: NDHS, 2013**

The pooled results of occupation of respondent divulged that most of the respondents who were not working had 1-2 children approximately (44%) while those working had 5+ children this has a significant relationship as chi-square value ( $X^2 = 661.8802$  P = 0.000). Furthermore, taking each ethnicity, more than two-third of those who not working among Yoruba ethnic groups had 1-2 children while those working had 3-4 children which has a significant relation at

5% level ( $X^2= 161.8330$  Pr = 0.000) but on the other hand, most women who were not working and those working has 5+ children in Hausa/Fulani ( $X^2= 272.6748$  Pr = 0.000) while Igbo ethnic group those working had 5+ children approximately (44%) and those not working had 1-2 children (approximately 61%) with respective chi-square results of ( $X^2= 258.7571$  Pr = 0.000). This result therefore shows that occupational status of women has effect of fertility behaviour of women in Nigeria.

**Table 4: Showing the Ethnicity Differential of Level of Education of Women and Fertility Behaviour**

		Fertility	Behaviour	
Background	1-2 children	3-4 children	5+	Chi-Square( $X^2$ )
Characteristics				
<b>Pooled</b>	23.55	24.35	52.1	$X^2= 2100$ Pr = 0.000
No education				
primary	22.98	28.31	48.71	
secondary	45.16	30.17	24.67	
Higher	47.43	33.83	18.74	
Total	31.42	27.6	40.97	
<b>Others</b>				
No education	24.76	26.46	48.78	$X^2= 913.98$ Pr = 0.000
primary	24.35	28.05	47.6	

secondary	49.74	27.51	22.75	
Higher	46.78	29.51	23.71	
Total	33.37	27.37	39.25	
<b>Yoruba</b>				
No education	18.07	32.77	49.16	$X^2 = 325.51$ Pr = 0.000
primary	18.96	39.34	41.7	
secondary	38.3	36.92	24.78	
Higher	52.76	37	10.12	
Total	34.9	37.26	27.84	
<b>Hausa</b>				
No education	23.54	22.67	53.79	$X^2 = 156.46$ Pr = 0.000
primary	29.36	22.73	47.91	
secondary	43.84	26.87	29.29	
Higher	36.54	27.88	35.58	
Total	25.92	23.07	51.01	
<b>Igbo</b>				
No education	7.75	17.05	75.19	$X^2 = 514.62$ Pr = 0.000
Primary	16.54	23.8	59.66	
secondary	43.48	29.46	27.06	



Higher	43.5	37.74	18.76	
Total	32.94	28.07	38.98	

**Source: NDHS, 2013**

The pooled results of educational status of respondent divulged that more than half of the respondents who had no education had 5+ children approximately, also those with primary education has majority given birth to 5+ children but there is a shift in fertility behaviour to 1-2 children as their educational status changes to secondary and higher education as majority of women had had 1-2 children, this has a significant relationship as chi-square value ( $X^2 = 2100$ ,  $Pr = 0.000$ ). Furthermore, taking each ethnicity, almost half of those with no education and primary education in Yoruba ethnic groups had 5+ children with respective (49.16 and 41.7%) while majority of those with secondary and higher education had 1-2 children which has a significant relation at 5% level ( $X^2 = 325.51$ ,  $Pr = 0.000$ ). More so, most women who had primary and no education had given birth to 5+ children while majority of those with secondary or higher education had 1-2 children in Hausa/Fulani which has a significant relation at 5% level ( $X^2 = 156.46$ ,  $Pr = 0.000$ ) while in Igbo ethnic group like three-quarter of women with primary and no education had 5+ children while approximately 43% of those with secondary and higher education had 1-2 children which has a significant chi-square results of ( $X^2 = 156.46$ ,  $Pr = 0.000$ ). This result therefore shows that educational status of women has effect on fertility behaviour of women in Nigeria.

## Test of hypothesis

**H<sub>0</sub>:** There is no significant ethnicity differential between fertility behaviour and selected background characteristics of the respondents.

**H<sub>1</sub>:** There is a significant ethnicity differential between fertility behaviour and selected background characteristics of the respondents.

## Decision

The chi-square test revealed that there was a significant ethnicity differential between the fertility behaviour of women and all the selected background characteristics of the respondents. This implies that contraceptive use, wealth index, occupation, ideal number of children, religion, educational attainment of the mother were significantly related with fertility behaviour of mothers. Therefore will reject the null hypothesis and fail to reject the alternate hypothesis.

**Table 5: Poisson Regression showing the relationship between Fertility Behaviour and Ethnicity by controlling for other variables**

Child Ever Born	IRR	P-value	[95% Conf. Interval]
<b>Ethnicity</b>			
Yoruba	1.0 (RC)		
Hausa	1.147	0.000	1.106 - 1.189
Igbo	1.034	0.162	0.986 - 1.084
Other	1.080	0.000	1.047 - 1.114

<b>Age of Respondents</b>			
15-24	1.0 (RC)		
25-34	2.123	0.000	2.072 - 2.175
35+	3.376	0.000	3.297 - 3.457
<b>Spouse Education</b>			
No education	1.0 (RC)		
primary	1.001594	0.871	0.982- 1.020
secondary	.9509014	0.000	0.931 - 0.970
Higher	.9564702	0.001	0.932-0.980
<b>Ideal No of Children</b>	1.0 (RC)		
1-2 children			
3-4 children	1.071535	0.051	0.995- 1.148
5+	1.413384	0.000	1.320 - 1.513
<b>Contraceptive Usage</b>			
Not Using	1.0 (RC)		
Using	1.114908	0.000	1.094 - 1.135
<b>Religion</b>			
Christianity	1.0 (RC)		
Muslim	1.027646	0.009	1.006- 1.048

Others Religion	1.046973	0.059	0.998 - 1.098
<b>Respondents</b>			
<b>Education</b>			
No education	1.0 (RC)		
primary	.9845874	0.118	0.965- 1.003
secondary	.8534477	0.000	0.834 - 0.873
Higher	.7174548	0.000	0.692 - .743
<b>Occupation</b>			
Not Working	1.0 (RC)		
Working	1.072782	0.000	1.056 - 1.089
<b>Residence</b>			
Urban	1.0 (RC)		
Rural	1.032448	0.000	1.017367 - 1.047752

Source: Authors Work, NDHS 2013

The incidence rate ratio of fertility behaviour of Hausa is likely to increase by 1.147 times than that of Yoruba, while incidence rate ratio of Igbo likely to increase by only 3% than that of Yoruba and other ethnic group were found to be more likely increase by 8 % with (IRR=1.08 and IRR=1.081). This means that there is a differential factors in the likelihood of having more children by different ethnic groups in Nigeria. When control for other socio-demographic characteristics it was found that age 25-34yers has more likely incident ratio of 2 times of

fertility behaviour than those in ages 15-24years and women in ages 35+ are 3times more likely to have more children than those in ages 15-24years. It was also found that education of respondents is a key factor to reducing the high fertility behaviour of women in each ethnic group as those who have secondary school and higher education has a significant relationship to have less fertility behaviour than those in no education as seen in the IRR =0.950 for Secondary and IRR=0.956 for those in higher education.

### **PERCEPTION ABOUT FAMILY SIZE**

For this study, the total of ten women age 15- 49 of reproductive ages were interviewed on their perceptions about family size in Nigeria. The analysis of the study was done in line with the in-depth interview questions.

#### **What is your opinion about family size of your ethnic group?**

The respondent explains her opinion about the family size of her ethnic group and she explains thus:

*“It is because of the desired for son, which make her gave up to six children, the second woman said she preferred large family size because that is what her husband want, then the last woman said their income can only cater for three children” (RES 1, Yoruba, SSCE holder, 42years, 6 Children)*

### **How often do think people are spacing their child?**

Respondent explains different ways the spaced their child and they explained thus:

*“Some mothers are spacing while some are not because it is not everybody that is aware of family planning and they make use of family planning only they are aware of its benefits in other to space their child bearing interval” (RES 2, Yoruba, HND holder, 2 children, 38years).*

### **Despite the introduction of family planning, do you think people are still spacing their child bearing?**

Based on the responses of my respondents they explained their about the introduction of family planning and child spacing

*The first informant woman said child bearing has been her family problem because of that her husband married another wife, then the second woman said it was because of she want to please husband that is why she is having 8 children in marriage of 15 years. (RES 3, Yoruba, 2 wives, with no child and second with 4 children, ages 45years and 38 years) said I and my husband agreed that 2-3 years is the best because of the situation on ground. (RES 5, Igbo, 35years, Primary education, 2 children)*

### **What are the factors responsible for increase or decrease family size?**

There were different factors responsible for increase or decrease family size and they replied thus:

*she said that Government is not doing anything about it and that is the much reason why we have large family size in the country and to reduce the family size government should introduce the use of family planning program and that would be free should be effective and make it available to everybody (RES 9, Calabar-Efik, 42years, SSCE, 7 children) said that she has large family size because she married early and that they like to have more daughter than son. They both said that they do not space their child bearing that immediately they finish breast feeding they go for another pregnancy since<sup>3</sup> they are still in their child bearing age. They both said they do not know what I meant by family planning, that they are not aware of it so they don't make use of it. (RES 10, Hausa, 35years Muslim, no education, 6 children)*

### **DISCUSSION OF FINDINGS**

The results disclosed that majority of Yoruba ethnic group had given birth to 3-4 children while more than half of sampled Hausa respondents had given birth to 5+children, but the fertility behaviour of Igbo ethnic group revealed that more than one-third of sampled women had given birth to 5+ children.

It was found that contraceptive usage was very low in all of the ethnic groups in Nigeria as most of the ethnic groups have highest of non- use while the highest usage is found in Yoruba Ethnic group (34%) while the least is from the Hausa ethnic group(1.71%). This results support the findings upheld by NDHS report that there contraceptive usage is low in Nigeria especially among the Hausa/ Fulani ethnic group (National Population Commission (NPC) and ICF international, 2014).

The wealth index of women in this study disclosed an interesting results as most of the Yoruba ethnic group were categorized as rich and the Hausa ethnic groups more than half were classified as poor people while the Igbo almost 70% of the women were categorized as rich and other ethnic group were classified as rich too. This could be because a lot of the women in the Hausa ethnic group were victim of husbands with multiple partners thereby put up a serious challenge for the women to carter for her children needs based on neglect from husbands.

Also the spouse of sample respondents disclosed that most of Hausa/Fulani partner has no basic education whereas other ethnic group has most of them possesses secondary education as in most of partners of Yoruba , Igbo and other ethnic groups have their highest proportion of educational attainment to be in secondary education. This could be so because most of the husbands in Hausa/Fulani ethnic groups were nomadic farmers who move around with their animals with no provision for modern education except Arabic education. Also it was found that most of the respondents were engaged in economic activities as more three-quarters were working among the Yoruba ethnic groups while Hausa/Fulani have 60.05% who were working, Igbo (66%) were working and 61.35% were working in other ethnic groups.



## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECCOMENDATIONS**

#### **5.0 INTRODUCTION**

This chapter is devoted to the presentation of the summary of findings, conclusion and recommendations drawn from the analysis of the research study on family type and under-five mortality in Nigeria.

#### **5.1 SUMMARY OF THE FINDINGS**

The major findings from the study shows that ethnicity differential in fertility behaviour of respondents revealed that Hausa has the highest fertility behaviour with average total children ever born of 4 .0 children while the ethnic group with lowest average children ever born children happen to be from Yoruba (2.3 children). The results disclosed that majority of Yoruba ethnic group had given birth to 3-4 children while more than half of sampled Hausa respondents had given birth to 5+children, but the fertility behaviour of Igbo ethnic group revealed that more than one-third of sampled women had given birth to 5+ children.

It was found that contraceptive usage was very low in all of the ethnic groups in Nigeria as percentage of non-used is higher across all regions. The highest usage is found in Yoruba Ethnic group (34%) while the least is from the Hausa ethnic group(1.71%). This results support the findings upheld by NDHS report that contraceptive usage is low in Nigeria especially among the Hausa/ Fulani ethnic group (National Population Commission (NPC) and ICF international, 2014)

The second objective seeking to examine the association between ethnicity and fertility behaviour of women revealed interesting results as it was found that contraceptive use, occupational and educational status as well as their perception of ideal number of children form the key factors in determining fertility differences among ethnic group.

The pooled results of contraceptive use among the sampled respondent disclosed that most of the respondents who were not using had 5+ children (41.67%) while those using also had 5+ children this has a significant relationship as chi-square value ( $X^2 = 111.7110$  Pr = 0.000) which has a significant relationship. Furthermore, majority of those who uses contraceptives among Yoruba ethnic groups had 3-4 children while those not using had 1-2 children but on the other hand, most women who were not using contraceptives and those using has 5+ children in both Hausa/Fulani (50% and 54%) and Igbo ethnic group(37.4% and 42.56%) with respective chi-square results of ( $X^2= 7.2808$ , Pr = 0.026) and ( $X^2= 35.2940$  Pr = 0.000). This result therefore shows that contraceptive use has effect on fertility behaviour of women across the ethnic group.

The chi-square test revealed that there was a significant ethnicity differential between the fertility behaviour of women and all the selected background characteristics of the respondents. This implies that contraceptive use, wealth index, occupation, ideal number of children, religion, educational attainment of the mother were significantly related with fertility behaviour of mothers. Therefore will reject the null hypothesis and conclude that there are ethnicity differentials in contraceptive use, wealth index, religion and educational attainments.

## 5.2 CONCLUSION

Fertility studies in Nigeria dated back to decades has been a major focus of many scholars and they have examined a wide range of topics on fertility though mostly at local geographical areas. This research project has joined the trends which has validated that there is a ethnicity differentials in fertility behaviour of women in Nigeria. As it has explored the perception of different ethnic groups on family size and related same to some key demographic factors which determine the fertility behaviour in the ethnic group.

The incidence rate ratio of fertility behaviour of Hausa is likely to increase by 1.147 times than that of Yoruba, while incidence rate ratio of Igbo likely to increase by only 3% than that of Yoruba and other ethnic group were found to be more likely increase by 8 % with (IRR=1.08 and IRR=1.081). This means that there is a differential factors in the likelihood of having more children by different ethnic groups in Nigeria. When control for other socio-demographic characteristics it was found that age 25-34yers has more likely incident ratio of 2 times of fertility behaviour than those in ages 15-24years and women in ages 35+ are 3times more likely to have more children than those in ages 15-24years. It was also found that education of respondents is a key factor to reducing the high fertility behaviour of women in each ethnic group as those who have secondary school and higher education has a significant relationship to have less fertility behaviour than those in no education as seen in the IRR =0.950 for Secondary and IRR=0.956 for those in higher education

### 5.3 RECOMMENDATION

Based on the findings of this study, the following recommendations are suggested to improve mothers orientation on high fertility in each ethnic group and enhance the ethnic group in achieving sustainable development goal.

More education, campaigns rallies, programs, media jingles should be used to discourage high family size, Mothers should be made to realized that the risk in high fertility focus more on them than their husband. Thus be encourage to use family planning to safe their life and children.

Also, the goal No 2 of zero hunger to be achieved among Hausa ethnic group only by Providing support to governments in the state to reflect the new global agenda in national development plans and policies. This work is already underway in many countries at national request to United Nations; in this, government will make use of extensive findings of scholars over the past five years with the MDG Acceleration Framework to reduce the Almajrimenace in the region. To promote sustainable economic growth, employment and decent work for all women in Nigeria should be encourage to work. This helps meet the financial needs of the family.

Use of contraceptives is another key factor that needs to be focusing more so as to avoid some things and stop curing what can be avoided.

However, if the recommendations given in this study were implemented there should be an improvement in the level of ethnic differentials in fertility behaviours in Nigeria as a whole.

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APPENDIX

INDEPT INTERVIEW GUIDE

PERCEPTION ABOUT FAMILY SIZE ON MAJOR ETHNIC GROUP IN NIGERIA

Name of Note taker .....

Date.....

Place of discussion.....

Time discussion started.....

Time ended.....

I am OgunyemiYetundeTosin a final year student of the department of Demography and Social Statistics, Federal University, Oye-Ekiti, Ekiti State, Nigeria. With matriculation number DSS/12/0616. I am conducting a research on **ETHNIC DIFFERENTIALS IN FERTILITY BEHAVIOURS IN NIGERIA**. I am interested in knowing your perception about your family size and why it is different from other ethnic groups in Nigeria. I hope that your answers to my questions reveal your perception about yourfamily size and this will help to buttress the result of my research.

I expect our discussion to last about 30- 60 minutes. Thank You.

## INDEPT INTERVIEW GUIDE

### QUESTIONS

1. What are your background variable characteristics?

i AGE OF PARTICIPANT

ii LEVEL OF EDUCATION

iii NUMBER OF CHILDREN

iv RELIGION

v OCCUPATION

vii RESIDENCE

viii ETHNICITY

2. What is your opinion about family size of your ethnic group?

3. How often do think people are spacing their child?

4. Despite the introduction of family planning, do you think people are still spacing their child bearing ?

5. What are the factors responsible for increase or decrease family size?

6. Do you think 3 or 5 is better ?

7. What is the effort of the government in addressing the issue of family size of your ethnic group? Have they being effective?